

A CHECKLIST OF THE STONEFLIES (PLECOPTERA) OF KENTUCKY¹

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ABSTRACT: Examination of numerous collections and published records has resulted in a summary of the stoneflies of Kentucky. A total of 77 species representing nine families and 30 genera is found in the state. Five state records are added to the plecopteran fauna of Kentucky. Fifteen additional species which occur in nearby states, but which have not yet been found in Kentucky, are also noted.

Prior to 1982, little detailed work had been focused on the identification of stoneflies from Kentucky. Some investigators, including Ross and Ricker (1964), Illies (1966), Ricker and Ross (1968), Zwick (1973), White (1974), James (1976), Stark and Baumann (1978), Harker et al. (1979, 1980) and Picazo and DeMoss (1980), have published plecopteran records for the state. In a preliminary checklist, Tarter et al. (1982) recorded 70 species of stoneflies for Kentucky. The classification system of Illies (1966) and Zwick (1973) is followed in this study.

The following numbers of species have been recorded from nearby states: Illinois - 49 species (Frison, 1942); Ohio - 42 species (Gaufin, 1956); Indiana - 61 species (Bednarik and McCafferty, 1977); Virginia - 116 species (Kondratieff and Voshell, 1979); and West Virginia - 106 species (Tarter and Kirchner, 1980).

Fifteen additional species should eventually be collected in Kentucky. The following list includes species which occur in nearby states: *Acroneuria mela* Frison (IN, IL), *Allocapnia illinoensis* Frison (VA, IN, IL), *Alloperla banksi* Frison (VA, IL), *A. caudata* Frison (IL, IN, OH, VA), *Attaneuria ruralis* Hagen (IL, VA, OH), *Hydroperla crosbyi* (Needham and Claassen) (IN, IL), *Isogenoides varians* (Walsh) (IN, IL, TN, VA), *Isoperla decepta* Frison (IN, OH, IL), *I. dicala* Frison (WV, VA, IN), *I. orata* Frison (WV, VA, OH), *Leuctra tenuis* (Pictet) (WV, IN, VA, OH), *Paracapnia angulata* Hanson (WV, VA, IN), *Paragnetina kansensis* (Banks) (IN, IL), *Prostoia completa* (Walker) (WV, IN, VA) and *Talloperla maria* (Needham and Smith) (VA, TN, WV).

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Order Plecoptera

Suborder Arctoperlaria

Group Euholognatha

Superfamily Neumouroidea

Family Leuctridae

Subfamily Leuctrinae

Leuctra alexanderi Hanson*L. ferruginea* (Walker)*L. sibleyi* Claassen*Paraleuctra sara* (Claassen)*Zealeuctra claasseni* (Frison)*Z. fraxina* Ricker and Ross

Family Taeniopterygidae

Subfamily Brachypterinae

**Oemopteryx contorta* (Needham and

Claassen)

Taenionema atlanticum Ricker and Ross*Strophopteryx fasciata*

(Burmeister)

Subfamily Taeniopteryginae

Taeniopteryx burski Ricker and Ross*T. lita* Frison*T. maura* (Pictet)*T. metequi* Ricker and Ross*T. parvula* Banks

Family Nemouridae

Subfamily Amphinemurinae

Amphinemura delosa (Ricker)*A. nigritta* (Provancher)*A. varshava* (Ricker)*A. wui* (Claassen)

Subfamily Nemourinae

Prostoia similis (Hagen)*Soyedina vallicularia* (Wu)

Family Capniidae

Allocapnia cunninghami Ross and Ricker*A. curiosa* Frison*A. forbesi* Frison*A. frisoni* Ross and Ricker*A. granulata* (Claassen)*A. indiana* Ricker*A. mystica* Frison*A. mystica* Frison*A. nivicola* (Fitch)*A. ohioensis* Ross and Ricker*A. pygmaea* (Burmeister)*A. recta* (Claassen)*A. rickeri* Frison*A. smithi* Ross and Ricker*A. vivipara* (Claassen)*A. vivipara* (Claassen)*A. zola* Ricker

Group Systellognata

Superfamily Pteronarcyoidea

Family Pteronarcyidae

Allonarcys proteus* (Newman)Pteronarcys dorsata* (Say)**P. pictetii* Hagen

Family Peltoperlidae
Subfamily Peltoperlinae

Peltoperla arcuata Needham

Superfamily Perloidea

Family Perlodidae

Subfamily Isoperlinae

Isoperla bilineata (Say)

I. namata Frison

I. burski Frison

I. nana (Walsh)

I. clio (Newman)

I. richardsoni Frison

**I. holochlora* (Klapalek)

I. similis (Hagen)

I. marlynia Needham and Claassen

I. transmarina (Newman)

Subfamily Perlodinae

Cultus dicisus (Walker)

Malirekus hastatus (Banks)

Diploperla robusta Stark and Gausin

Remenus bilobatus (Needham and

Helopicus subvarians (Banks)

Claassen)

Family Chloroperlidae

Subfamily Chloroperlinae

Alloperla chloris Frison

Hastaperla brevis (Banks)

A. idei (Ricker)

Sweltsa onkos (Ricker)

A. imbecilla (Say)

Family Perlidae

Subfamily Acroneuriinae

Acroneuria abnormis Newman

A. perplexa Frison

A. carolinensis (Banks)

Eccoptera xanthenes (Newman)

A. evoluta Klapalek

Perlesta placida (Hagen)

A. filicis Frison

P. frisoni Banks

A. internata (Walker)

**Perlinella drymo* (Newman)

A. lycorias (Newman)

P. ephyre (Newman)

Subfamily Perlinae

Neoperla freytagi Stark and Bauman

Paragnetina media (Walker)

N. gausini Stark and Baumann

Phasganophora capitata (Pictet)

N. stewarti Stark and Baumann

*state record

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